

7.0 SRB POST FLIGHT/RETRIEVAL DEBRIS ASSESSMENT

The BI-101 Solid Rocket Boosters were inspected for debris damage and debris sources at CCAFS Hangar AF on 22 May 2000. Both boosters were in excellent condition.

The frustums exhibited no debonds/unbonds or missing TPS.

All eight BSM aero heat shield covers had locked in the fully opened position.

The forward skirts exhibited no debonds or missing TPS. RSS antennae covers/phenolic base plates were intact, though one layer of the RH SRB +Z base plate had delaminated.

The Field Joint Protection System (FJPS) and the System Tunnel Covers closeouts were generally in good condition with no unbonds observed. A greater than usual amount of Hypalon paint was missing from cork closeouts, particularly on the GEI, cable runs, etc. The paint was missing predominantly from the systems tunnel side of the right SRB and the +Z side of the left SRB.

A sooted, 3/8-inch long by 5/8-inch wide by 1/4-inch deep gouge was detected on the leading edge of the RH SRB center field joint at approximately 220 degrees. However, there were no streaks on the adjacent white segment case leading to the gouge. The damage site will be sampled for laboratory analysis.

Separation of the aft ET/SRB struts appeared normal.

Foam was missing from the aft side of both left and right IEA's. The exposed substrate was sooted.

Aft skirt external surface TPS was nominal and in good condition. Typical blistering of Hypalon paint had occurred on the BTA insulation close-outs.

The holddown post Debris Containment Systems (DCS) appeared to have functioned normally, though the #2, #3, #5, and #7 plungers were not fully seated and were obstructed by frangible nut pieces as a result of water impact.

There was no evidence of a stud hang-up on this launch.

Overall, the external condition of both SRB's was excellent.

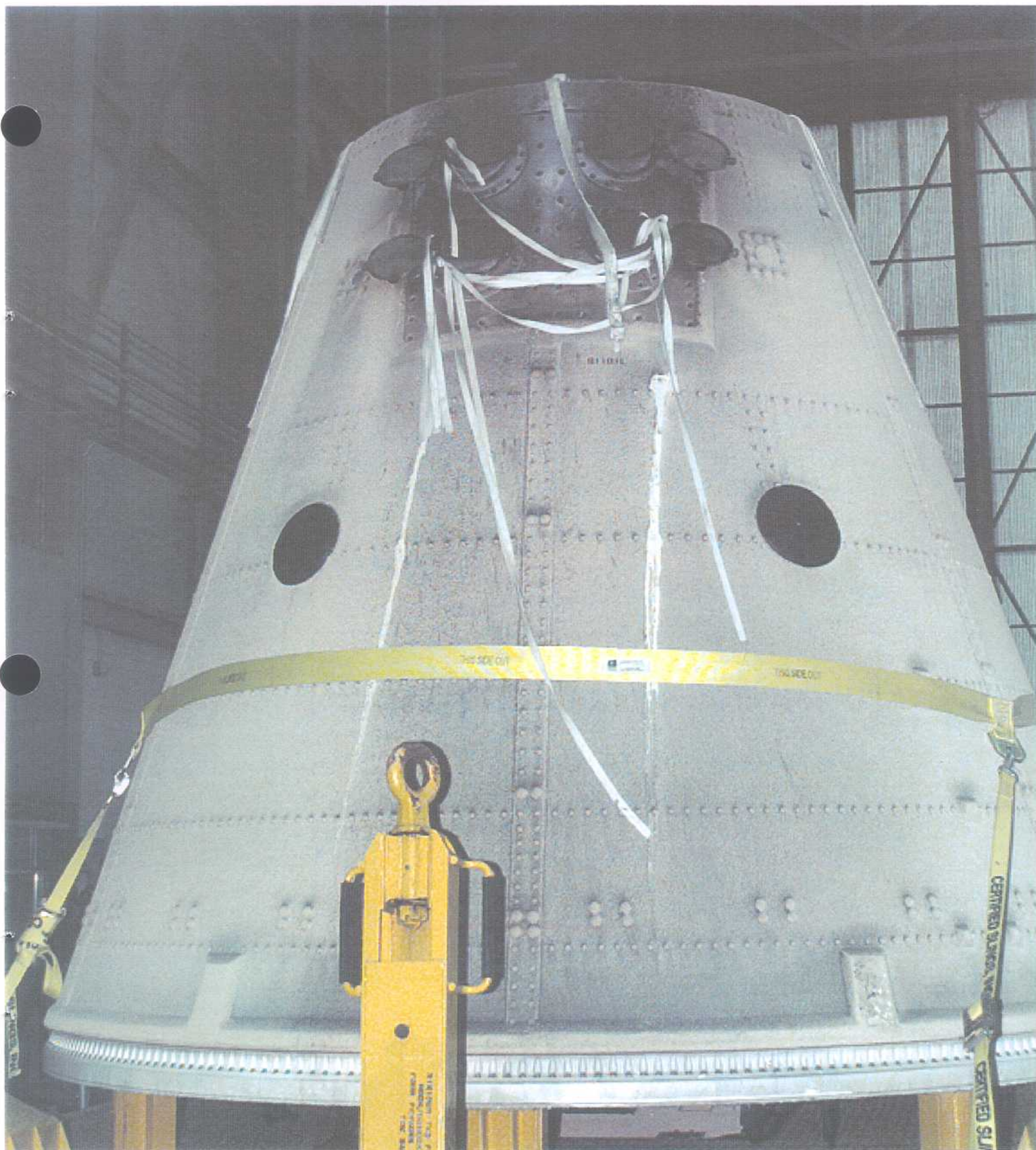


Photo 26: Frustum Post Flight Condition

The frustums exhibited no debonds/unbonds or missing TPS. All eight BSM aero heat shield covers had locked in the fully opened position.

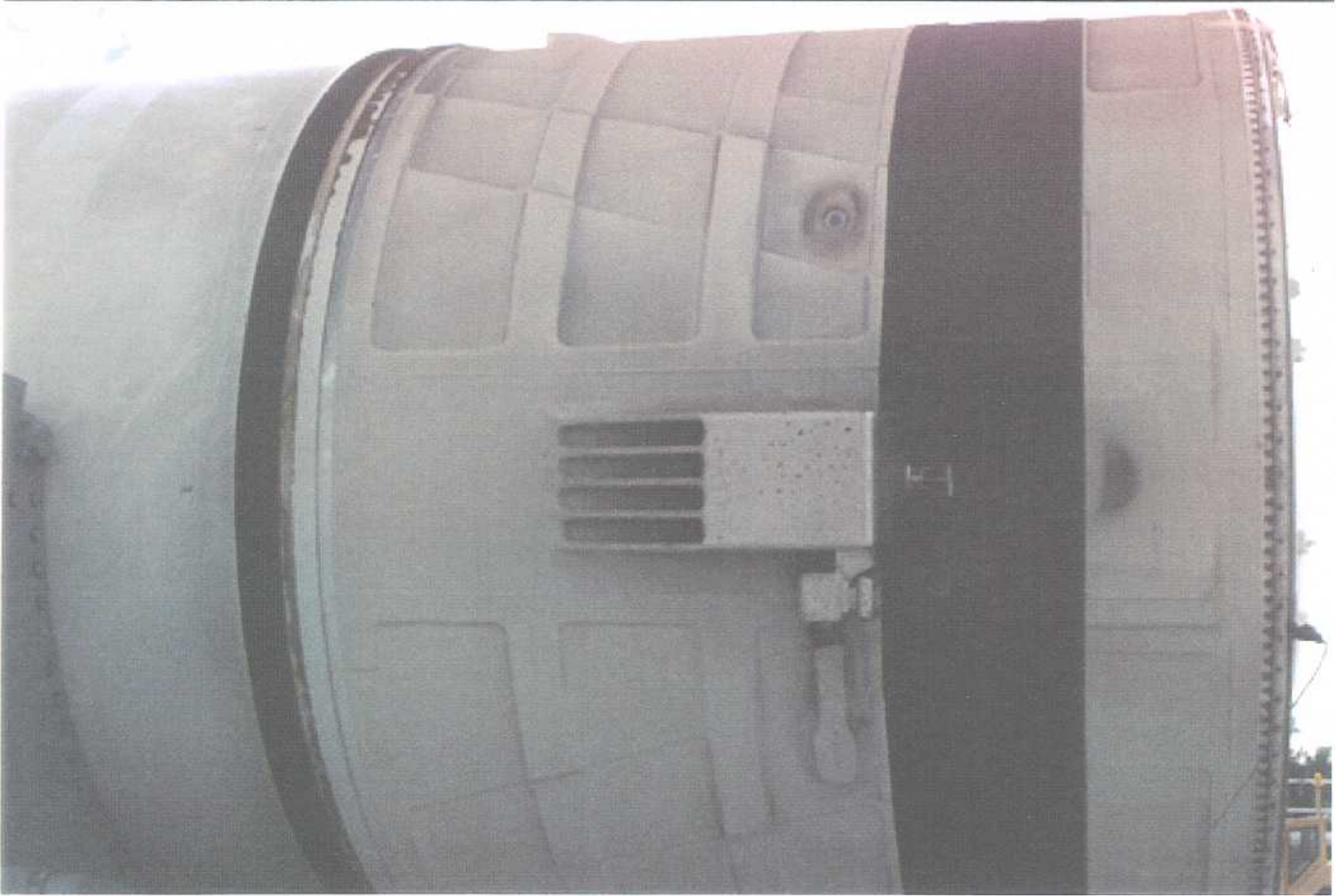
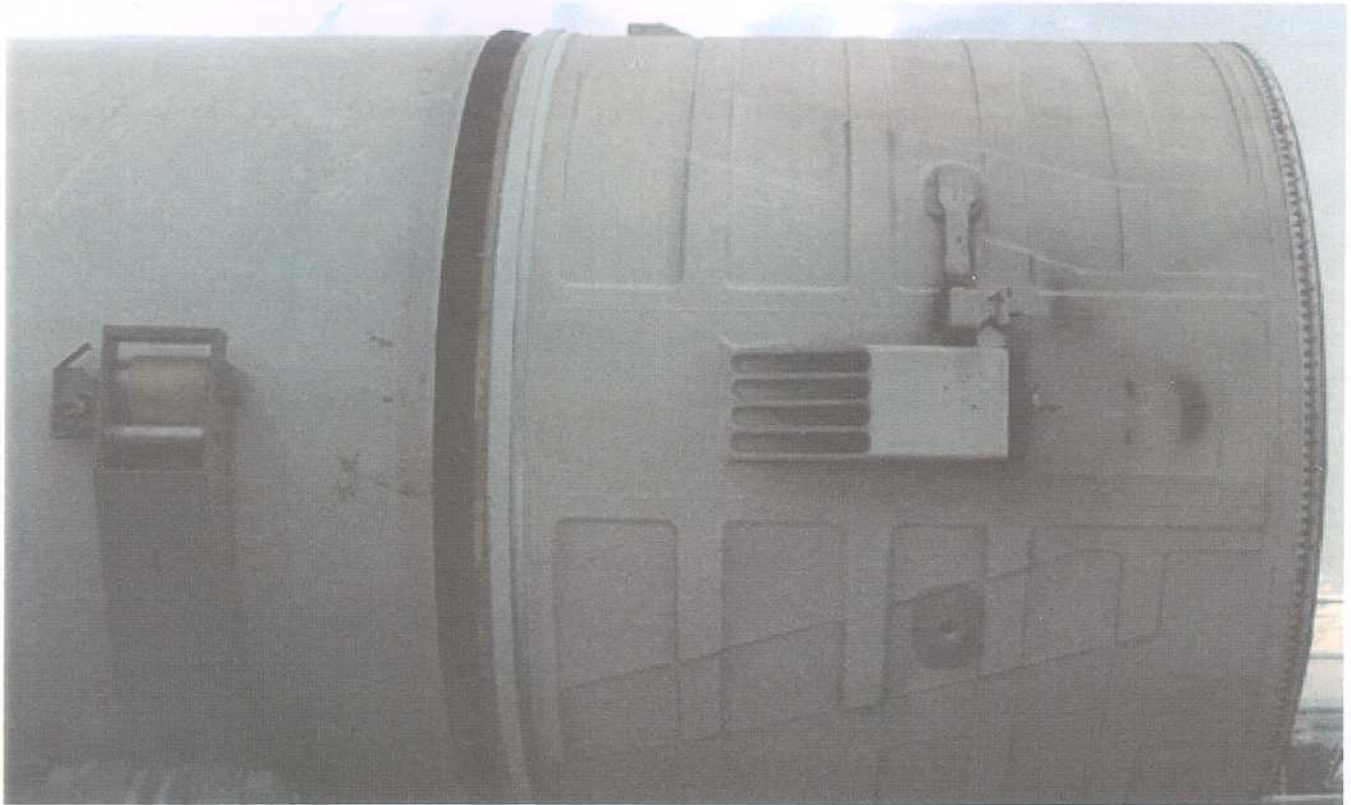


Photo 27: Forward Skirt Post Flight Condition

The forward skirts exhibited no debonds or missing TPS. RSS antennae covers/phenolic base plates were intact, though one layer of the RH SRB +Z base plate had delaminated.



Photo 28: Aft Skirt Post Flight Condition
Aft skirt external surface TPS was in good condition